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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,500	03/30/2001	James Douglas McDonald	ALRL03A	6547
40374	7590	12/13/2004	EXAMINER	
ALLEN LEROY LIMBERG, ESQ. 1053 KENSINGTON STREET PORT CHARLOTTE, FL 33952			TSE, YOUNG TOI	
			ART UNIT	PAPER NUMBER
			2637	

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/823,500

Applicant(s)

MCDONALD ET AL.

Examiner

YOUNG T. TSE

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

2. Claims 1-28 are objected to because of the following informalities:

In line 1 of each of the independent claims 1, 16, 20, 24 and 27, "Receiver apparatus" should be "A receiver apparatus".

In claim 2, line 1, "The claim 1 receiver apparatus" should be "The receiver apparatus of claim 1". Also see the dependent claims 3-7, 9-11, 13-15, 17-19, 21-23, 25-26 and 28 for the same reason set forth described in claim 2.

In claim 1, lines 5-6, "a medium subject" should be "the medium subject". Also see lines 5-6 of claims 24 and 27.

In claim 1, line 10, "supplying first adaptive" should be "supplying a first adaptive".

In claim 1, line 18, "said adaptive filter" should be "said first adaptive digital filter". Also see claim 3, line 1; claim 5, lines 2 and 30-31; claim 9, lines 2, 16, 21 and 23-24; and claim 15, line 15.

In claim 1, line 19, "first adaptive filter response" should be "the first adaptive filter response".

In claim 3, line 5, "a digital baseband signal" should be "the digital baseband signal".

In claim 5, line 21, "read-only memory" should be "the read-only memory". Also see claim 25, line 23.

In claim 6, lines 2-3, "said adaptive filter" should be "said decimation filter". Also see claim 7, line 4; claim 10, lines 2-3; and claim 11, line 4.

In claim 7, line 3, "a data stream, said trellis coder" should be "the data stream, said trellis decoder". Also see claim 11, line 3.

In claim 13, line 7, "in-phase" should be "in-phase oscillations".

In claim 13, line 11, "received front-end" should be "the received front-end". Also see claim 14, line 3; claim 17, line 6; and claim 21, line 10.

In claim 13, line 17, "an digital" should be "a digital".

In claim 14, line 11, "adaptive filter" should be "adaptive digital filter". Also see claim 14, lines 13, 14, 15, 19 and 25 and claim 15, lines 19, 57 and 64-65.

In claim 14, lines 47, 52 and 55, "adaptive filters" should be "adaptive digital filters".

In claim 15, line 30, "digital baseband signal" should be "said digital baseband signal".

In claim 20, line 9, "a selected one" should be "the selected one". Also see claim 21, lines 1-2 and claim 22, lines 1-2.

In claim 21, line 2, "to an" should be "to the". Also see claim 22, line 2.

In claim 25, lines 5-6, "a oversampling-rate" should be "an oversampling-rate".

In claim 28, line 19, "of a" should be "of the".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The configuration of claims 1-28 seems do not correspond to the disclosure of the drawings.

According to the present invention, a plurality of digital television receivers are shown in Figures 1-21, they appear include multiple species (or embodiments) in the Figures as recited in claims 1-28. In the instant application, claims 1, 16, 20, 24 and 27 are independent claims and claims 2-15, 17-19, 21-23, 25-26 and 28 are dependent claims. Based on the claimed subject matter recited in each of the claims, it is hard to understand or determine which claim(s) reads on which embodiment of the Figures as

recited in the claims, especially the claimed subject matter of each of the dependent claims which seems read on embodiments of the Figures, but without claiming a genetic claim recited in any of the independent claims in order to cover the common block elements in each of the embodiments.

For at least the reasons set forth describe above, the Applicants are requested to clarify the claims which can read on each of the embodiments of the Figures or explain how are the claimed subject matter of all the claims read on the block elements of the Figures.

If the claims read on different species or embodiments of the digital television receivers in Figures 1-21, the Applicants are required to select a single species or embodiment including which claims are corresponding to the selected single species or embodiment for prosecution.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 5-12, 14-23, 25-26 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5 (lines 4, 5, 8, 9, 10-11, 18, 20-21, 24-25 and 27), claim 6 (lines 5, 8, 9, 11 and 12), claim 7 (lines 7-8, 11, 12, 14 and 15), claim 9 (lines 4, 5-6, 8-9, 9-10, 11 and 18), claim 10 (lines 5, 6-7, 8, 10 and 11), claim 11 (lines 7-8, 9-10, 11, 13 and 14), claim 14 (lines 31, 32, 35, 36, 37-38, 43, 45 and 49), claim 15 (lines 35, 36, 40 and 41), claim 24 (lines 6, 7, 10, 11, 12-13, 22, 24 and 26-27), claim 26 (lines 5, 6-7, 10-11, 11-12, 13,

20 and 21) and claim 28 (lines 9, 10, 14 and 15), the phrases “the baseband digital modulating signal”, “said selected one of said single-carrier digital modulation signals”, “the actual reception channel”, “said discrete Fourier transform characterization of ideal reception channel response”, “the resulting quotient terms”, “the resulting product terms” and “said digital baseband” all lack antecedent basis.

In claim 15, line 44, the phrase “digital descriptions of oscillations” also lacks antecedent basis since it is unclear the in-phase or quadrature-phase oscillations or both the in-phase and quadrature-phase oscillations.

In claim 16, line 45, the phrase “said decimation filter response” also lacks antecedent basis since it is unclear the first or second decimation filter response. Also see claim 20, line 51.

In claim 6, lines 6-7, the phrase “a type that substantially preserves in its output signal the system function described in its input signal” is not understood. Also see claim 7, lines 9-10.

Conclusion

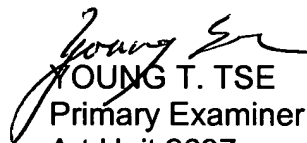
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

References Limberg et al. and Limberg are made of record as describing a related digital television receiver for digital transmissions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is (571) 272-3051. The examiner can normally be reached on Monday and Wednesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


YOUNG T. TSE
Primary Examiner
Art Unit 2637